KICKER®

SOLO-BARIC SUBWOOFER

S15L7, S12L7, S10L7, S8L7

©2007 Stillwater Designs

Models: S15L7 / S12L7 / S10L7 / S8L7

Congratulations on your KICKER purchase

Please record your purchase information and keep your sales receipt for validation of warranty.

Authorized Kicker Dealer: _____

Purchase Date: _____

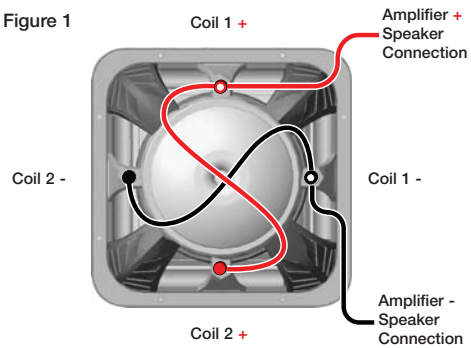
Subwoofer Model Number: _____

Subwoofer Serial Number: _____

Wiring Options

Solo-Baric subwoofers are available with dual 2Ω (ohm) or dual 4Ω voice coils. Both coils must be connected to a source of amplification. The dual 2Ω woofer will generate a 1Ω load if the coils are wired in parallel or a 4Ω load in series. The dual 4Ω woofer will provide a 2Ω load wired in parallel or 8Ω load wired in series. The terminals with the white dots are for the first voice coil. The terminals with solid-red and solid-black markings are for the second voice coil. See Figures 1 and 2.

Figure 1



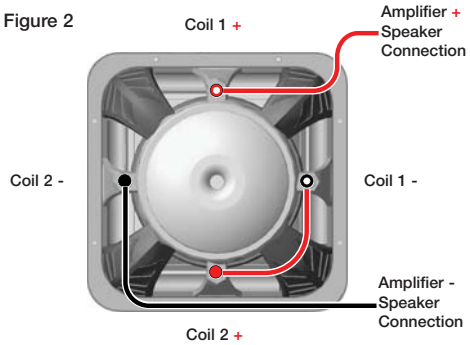
Parallel Wiring

Dual 2Ω Voice Coils = 1Ω Load
Dual 4Ω Voice Coils = 2Ω Load

Series Wiring

Dual 2Ω Voice Coils = 4Ω Load
Dual 4Ω Voice Coils = 8Ω Load

Figure 2



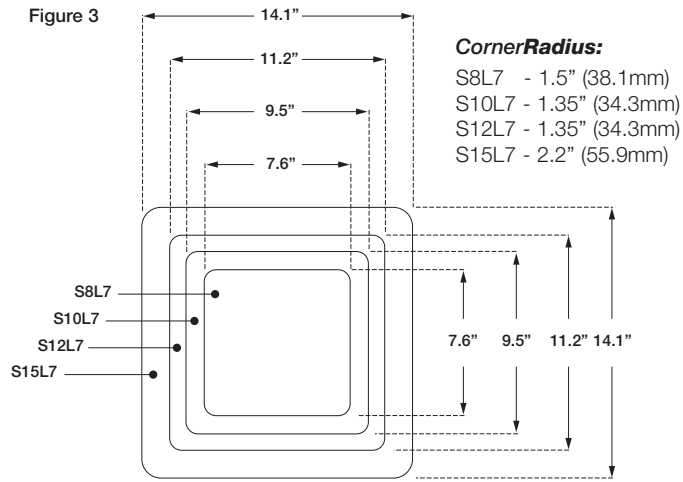
Performance

Model:	S8L7	S10L7	S12L7	S15L7
Nominal Impedance [Zn], ohm [per coil]	2 or 4	2 or 4	2 or 4	2 or 4
Resonance Frequency [fs], Hz	47.2	37.5	34.0	26.3
Power Handling Watts, Peak (RMS)	900 (450)	1200 (600)	1500 (750)	2000 (1000)
Total Q-Factor [Qts]	.644	.584	.513	.507
Equivalent Volume [Vas], ft^3 (L)	.36 (10.3)	.97 (27.5)	2.2 (62.5)	5.2 (148.6)
Outer Frame Dimension, in (cm)	8 13/16 (22.4)	10 11/16 (27.1)	12 9/16 (31.9)	15 5/8 (39.7)
Mounting Depth, in (cm)	4 11/16 (11.8)	6 3/16 (15.6)	6 11/16 (16.9)	8 1/2 (21.6)

Measurements based on the 4 ohm dual voice coil models.

Cutout Dimensions

Figure 3



Corner Radius:

S8L7 - 1.5" (38.1mm)
S10L7 - 1.35" (34.3mm)
S12L7 - 1.35" (34.3mm)
S15L7 - 2.2" (55.9mm)

Sealed Enclosure Applications

The Solo-Baric generates more sound pressure than an equivalently-sized round speaker and excels when used in the recommended sealed boxes. These sealed enclosure designs give the smoothest response with increased energy at the lowest frequencies, 20 to 30Hz. These designs deliver massive amounts of highly-accurate bass and can be driven with punishing levels of amplifier power.

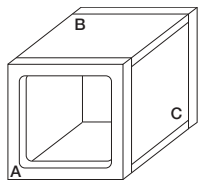
The Solo-Baric high performance suspension system can operate in a larger sealed enclosure. This maximum enclosure volume application is ideal for SQ (ultra sound quality) installations. The SQ enclosure generates a very flat response curve and superbly extends the subbass response.

Solo-Baric woofers perform well in any size sealed enclosure between the Compact and SQ volume recommendations. These systems will exhibit benefits of both designs: Compact produces high-impact bass, and SQ generates low bass frequency protraction. Overall, the system will sound more like the recommended enclosure design it is closest to in enclosure volume. These enclosure recommendations have been calculated with the airspace inside the enclosure and include the displacement of the woofer. All sealed-enclosure airspace should be filled to 50% loose poly-fil (polyester fiberfill) stuffing. Do not make the airspace greater than the SQ, maximum enclosure volume, recommendation.

Model:	Sealed Compact (Minimum Enclosure Volume)		Sealed SQ (Maximum Enclosure Volume)	
S8L7	.33 ft^3 (9.34L)	Power Handling = 200W RMS	.75 ft^3 (21.24L)	Power Handling = 200W RMS
S10L7	.66 ft^3 (18.69L)	Power Handling = 600W RMS	1.0 ft^3 (28.32L)	Power Handling = 600W RMS
S12L7	.88 ft^3 (24.92L)	Power Handling = 750W RMS	2.0 ft^3 (56.64L)	Power Handling = 750W RMS
S15L7	1.5 ft^3 (42.48L)	Power Handling = 1000W RMS	6.0 ft^3 (69.92L)	Power Handling = 1000W RMS

Panel Dimensions for Compact Sealed Enclosures using 3/4" (1.9cm) thick MDF:

Figure 4



Model:	Volume, ft^3 (L)	Panel A, in (cm)	Panel B, in (cm)	Panel C, in (cm)
S8L7	.33 (9.34)	10x10 (25.4x25.4)	10x8 (25.4x20.3)	8x8.5 (20.3x21.6)
S10L7	.66 (18.69)	12x12 (30.5x30.5)	12x10.5 (30.5x26.7)	10.5x10.5 (26.7x26.7)
S12L7	.88 (24.92)	13x13 (33x33)	13x11.5 (33x29.2)	11.5x11.5 (29.2x29.2)
S15L7	1.50 (42.48)	16.5x16.5 (42x42)	16.5x11.5 (42x29.2)	15x11.5 (38.1x29.2)

Please allow two weeks of break-in time for the subwoofer to reach optimum bass performance.

*Vented**Enclosure**Applications***

Ported Solo-Barics? Absolutely...and with a vengeance! These enclosures incorporate massive slot-loaded (rectangular) ports with ultra low air velocity for ground pounding street bass that will make your "skin bounce on your bones!" These boxes are the enclosure of choice for outrageous street bass and high performance SPL contests. If space is not a problem and you want to get the most from your Solo-Baric, try one of these ported designs. You will not be disappointed.

The ported Compact design increases bass efficiency and fits in many space-limited applications. Although it is the smallest recommended ported enclosure, the output from 30 to 80 Hz will be considerably higher than that of any sealed box. The SPL / Deep Bass ported design has even more output in this crucial frequency band.

The SPL / Deep Bass is the largest and most efficient enclosure design. The SPL / Deep Bass delivers the sonic output needed to win SPL contests and it produces bass notes "all the way down to the cella". This design turns heads and jump starts your heart.

Model:	Vented**Compact (**Minimum**Enclosure****Volume)**	Vented**SPL/DeepBass (**Maximum**Enclosure****Volume)**
S**8L7**	.66ft^3 (18.7L) + port displacement	1.0 ft^3 (28.3L) + port displacement
	1.5 x 9.5" (3.8x24cm) port, 19.25" (49cm) long	2 x 9.5" (5.1x24cm) port, 21.25" (54cm) long
	Power Handling = 375W RMS	Power Handling = 375W RMS
S**10L7**	1.25 ft^3 (35.4L) + port displacement	2.25 ft^3 (63.7L) + port displacement
	2.5 x 11.25" (6.4x29cm) port, 19.75" (50cm) long	3 x 11.25" (7.6x29cm) port, 18" (46cm) long
	Power Handling = 450W RMS	Power Handling = 450W RMS
S**12L7**	1.75 ft^3 (49.6L) + port displacement	3.25 ft^3 (92L) + port displacement
	2.5 x 13.25" (6.4x34cm) port, 22.5" (57cm) long	3 x 13.25" (7.6x34cm) port, 14.5" (37cm) long
	Power Handling = 600W RMS	Power Handling = 600W RMS
S**15L7**	3.0 ft^3 (85L) + port displacement	6.0 ft^3 (170L) + port displacement
	2.5 x 16.25" (6.4x41cm) port, 19.5" (50cm) long	3.5 x 16.25" (8.9x41cm) port, 13.75" (35cm) long
	Power Handling = 750W RMS	Power Handling = 750W RMS

*Box**Building**Notes***

Use 3/4" (1.9cm) or thicker MDF (medium density fiberboard) and seal the joints with silicone. Use the "template" inside your Solo-Baric's shipping carton to mark the mounting hole, then cut directly on the line. These designs need internal bracing. Add triangular bracing between each of the larger unsupported panels. See Figure 5.

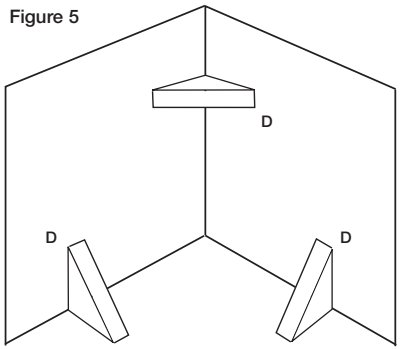
All the cubic feet (L) measurements in this manual include the displacement of the woofer. For the vented enclosures the displacement of the port must be calculated and added to the internal volume of the final design. Use the outer dimensions of the port and multiply "X x Y x Z", convert to cubic feet, for example the S12L7 vented compact design's external port dimensions are, using 3/4" (1.9cm) MDF: [(13.25" + 1.5" total MDF wall thickness) x (2.5" + 1.5" total MDF wall thickness) x 22.5"] x (1 ft^3 / 1728 in^3) = .77 ft^3, and add this number to the internal volume of the enclosure, S12L7's 1.75 ft^3 + .77 ft^3 = 2.52 ft^3. See Figure 6. Due to the necessary length of these ports, you may want to fold the port along the bottom and back walls. It will be impractical to use round ports for these designs.

Do not install a port opening against a solid surface, such as an internal brace, back-panel or trunk wall, seat or interior panel of your vehicle. The port opening must remain unobstructed. Use the smallest dimension of the rectangular port as the minimum amount of space between the port opening and any solid surface to insure unrestricted airflow.

If you prefer an ultra-smooth bass response, you should loosely fill your Solo-Baric enclosure with poly-fil stuffing. Ported designs will require covering the end of the port (located inside the box) with grill cloth, chicken wire, or expanded metal to prevent the poly-fil from exiting the port. The use of poly-fil will slightly decrease efficiency, but will deepen and extend the low frequency output.

For more advice on box building, refer to your Authorized Kicker Dealer, or click on the *Support* tab on the Kicker homepage, *www.kicker.com*. Choose the *Technical Manuals* link and then download or view the corresponding information. Please E-mail *support@kicker.com* or call Technical Services (405) 624-8583 for specific or unanswered questions.

Figure 5



D = 3 x 3 for S15L7, S12L7
D = 2 x 2 for S10L7, S8L7

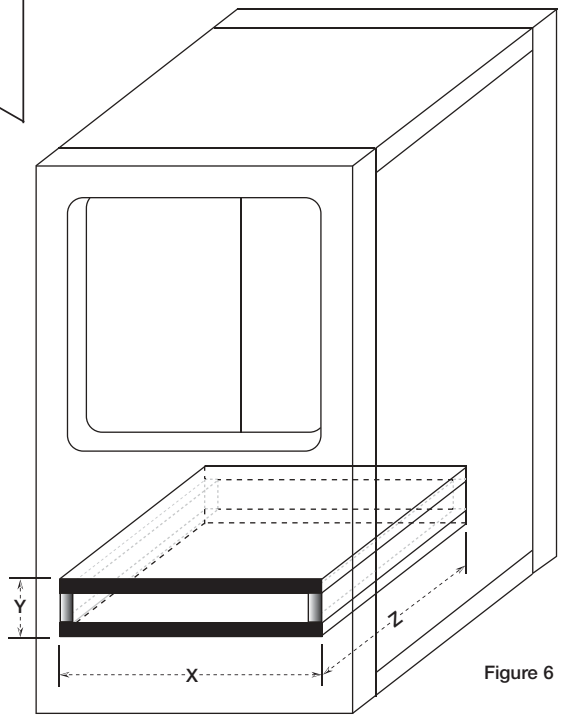


Figure 6

The displacement of the port must be calculated and added to the internal volume of the final design. The dimensions for X, Y, and Z may vary based on the thickness of the material used to make the port.

*A Note on Power**Handling**Capacity***

Solo-Baric subwoofers will handle massive amounts of power in any of the recommended enclosures, minimum or maximum. The smaller enclosures are best for use in limited-space applications. The larger recommended enclosures will yield slightly more bass at the lowest frequencies. The listed Power Handling capacities assume that both voice coils are in use. Always connect both coils in a dual voice-coil speaker.

Note: The use of a subsonic filter will significantly increase the power handling.
The power handling specifications in these charts are calculated using a 25Hz, 24dB per octave subsonic filter.

*Acoustics**Limited**Warranty*

Kicker warrants this product to be free from defects in material and workmanship under normal use for a period of THREE (3) MONTHS from date of original purchase with receipt. When purchased from an Authorized KICKER Dealer it is warranted for ONE (1) YEAR from date of original purchase with receipt. In all cases you must have the original receipt. Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Kicker will repair or replace (at its discretion) the defective merchandise with equivalent merchandise at no charge. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products.

This warranty is valid only for the original purchaser and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties; therefore these exclusions may not apply to you. This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise should be returned to your local Authorized Stillwater Designs (Kicker) Dealer for warranty service. Assistance in locating an Authorized Dealer can be found at www.kicker.com or by contacting Stillwater Designs directly. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (Kicker), call the Kicker Customer Service Department at (405) 624-8510 for a Return Merchandise Authorization (RMA) number. Package all defective items in the original container or in a package that will prevent shipping damage, and return to:

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return only defective components. The return of functioning items increases your return freight charges. Non-defective items will be returned freight-collect to you.

Include a copy of the original receipt with the purchase date clearly visible, and a "proof-of-purchase" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from the type of sale and manufacturing date code. Freight must be prepaid; items sent freight-collect, or COD, will be refused.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed.
It does not cover:
- o Damage due to improper installation
- o Subsequent damage to other components
- o Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation
- o Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse
- o Any cost or expense related to the removal or reinstallation of product
- o Speakers damaged due to amplifier clipping or distortion
- o Items previously repaired or modified by any unauthorized repair facility
- o Return shipping on non-defective items
- o Products with tampered or missing barcode labels
- o Products returned without a Return Merchandise Authorization (RMA) number
- o Freight Damage
- o The cost of shipping product to Kicker
- o Service performed by anyone other than Kicker

HOW LONG WILL IT TAKE?

Kicker strives to maintain a goal of 24-hour service for all acoustics (subwoofers, midrange drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

Failure to follow these steps may void your warranty. Any questions can be directed to the Kicker Customer Service Department at (405) 624-8510.

Note: All specifications and performance figures are subject to change. Please visit the www.kicker.com for the most current information. To get the best performance from your new Kicker Subwoofer, we recommend using genuine Kicker Accessories and Wiring.

*International**Warranty*

Contact your International Kicker dealer or distributor concerning specific procedures for your country's warranty policies.

WARNING: KICKER products are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing. Please use common sense when controlling volume.

GARANTÍA INTERNACIONAL ***Versión**Español***

Comuníquese con su concesionario o distribuidor Kicker internacional para obtener infor ación sobre procedimientos específicos relacionados con las normas de garantía de su país.

ADVERTENCIA: Los excitadores Kicker son capaces de producir niveles de sonido que pueden dañar permanentemente el oído. Subir el volumen del sistema hasta un nivel que produzca distorsión es más dañino para el oído que escuchar un sistema sin distorsión al mismo volumen. El dolor es siempre una indicación de que el sonido es muy fuerte y que puede dañar permanentemente el oído. Sea precavido cuando controle el volumen.

La frase "combustible para vivir la vida Livin' Loud™ a todo volumen" se refiere al entusiasmo por la vida que la marca Kicker de estéreos de automóvil representa y a la recomendación a nuestros clientes de que vivan lo mejor posible ("a todo volumen") en todo sentido. La línea de altavoces y amplificadores Kicker es la mejor del mercado de audio de automóviles y por lo tanto representa el "combustible" para vivir a todo volumen en el área de "estéreos de automóvil" de la vida de nuestros clientes. Recomendamos a todos nuestros clientes que obedezcan todas las reglas y reglamentos locales sobre ruido en cuanto a los niveles legales y apropiados de audición fuera del vehículo.

INTERNATIONALE GARANTIE ***Deutsche**Version***

Nehmen Sie mit Ihren internationalen Kicker-Fachhändler oder Vertrieb Kontakt auf, um Details über die Garantieleistungen in Ihrem Land zu erfahren.

WARNUNG: KICKER-Treiber können einen Schallpegel erzeugen, der zu permanenten Gehörschäden führen kann! Wenn Sie ein System auf einen Pegel stellen, der hörbare Verzerrungen erzeugt, schadet das Ihren Ohren mehr, als ein nicht verzerrtes System auf dem gleichen Lautstärkepegel. Die Schmerzschwelle ist immer eine Anzeige dafür, dass der Schallpegel zu laut ist und zu permanenten Gehörschäden führen kann. Seien Sie bei der Lautstärkeeinstellung bitte vernünftig!

Der Slogan "Treibstoff für Livin' Loud" bezieht sich auf die mit den Kicker-Autostereosystemen assoziierte Lebensfreude und die Tatsache, dass wir unsere Kunden ermutigen, in allen Aspekten ihres Lebens nach dem Besten ("Livin' Loud") zu streben. Die Lautsprecher und Verstärker von Kicker sind auf dem Markt für Auto-Soundsysteme führend und stellen somit den "Treibstoff" für das Autostereoerlebnis unserer Kunden dar. Wir empfehlen allen unseren Kunden, sich bezüglich der zugelassenen und passenden Lautstärkepegel außerhalb des Autos an die örtlichen Lärmvorschriften zu halten.

GARANTIE INTERNATIONALE ***Version**Française***

Pour connaître les procédures propres à la politique de garantie de votre pays, contactez votre revendeur ou distributeur International Kicker.

AVERTISSEMENT: Les haut-parleurs Kicker ont la capacité de produire des niveaux sonores pouvant endommager l'ouïe de façon irréversible ! L'augmentation du volume d'un système jusqu'à un niveau présentant une distorsion audible endommage davantage l'ouïe que l'écoute d'un système sans distorsion au même volume. Le seuil de la douleur est toujours le signe que le niveau sonore est trop élevé et risque d'endommager l'ouïe de façon irréversible. Réglez le volume en faisant prevue de bon sens !

L'expression " carburant pour vivre plein pot " fait référence au dynamisme de la marque Kicker d'équipements audio pour véhicules et a pour but d'encourager nos clients à faire le maximum (" vivre plein pot ") dans tous les aspects de leur vie. Les haut-parleurs et amplificateurs Kicker sont les meilleurs dans le domaine des équipements audio et représentent donc pour nos client le " carburant pour vivre plein pot " dans l'aspect " installation audio de véhicule " de leur vie. Nous encourageons tous nos clients à respecter toutes les lois et réglementations locales relatives aux niveaux sonores acceptables à l'extérieur des véhicules.

STILLWATER Designs®
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